

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A continuous method of production of carbon nanoparticles, comprising the steps of:

continuously providing substrate particles;

providing on the substrate particles a transition metal formate or oxalate compound which is decomposable to yield the transition metal under a non-reducing atmosphere conditions permitting carbon nanoparticle formation;

fluidizing the substrate particles with a flow of gaseous carbon source;

heating the transition metal formate or oxalate on the substrate particles contacting a gaseous carbon source with the substrate particles;

before, during or after said contacting step the gaseous carbon source with the substrate particles, decomposing the transition metal compound formate or oxalate to yield the transition metal on the substrate particles;

forming carbon nanoparticles by decomposition of the carbon source catalysed by the transition metal; and

collecting the carbon nanoparticles formed by elution.

2.- 5. (Cancelled).

6. (Previously Presented) A method as claimed in Claim 1, wherein the transition metal is nickel, iron or cobalt.

7. (Previously Presented) A method as claimed in Claim 1, wherein the gaseous carbon source is a hydrocarbon or carbon monoxide.

8. (Original) A method as claimed in Claim 7, wherein the gaseous carbon source is methane or acetylene.

9. (Previously Presented) A method as claimed in Claim 1, wherein the gaseous carbon source is passed over the substrate particles.

10. (Previously Presented) A method as claimed in Claim 1, wherein the gaseous carbon source is mixed with a diluent.

11. (Original) A method as claimed in Claim 10, wherein the diluent is argon.

12. (Previously Presented) A method as claimed in Claim 1, wherein the substrate particles comprise oxide particles and/or silicate particles.

13. (Original) A method as claimed in Claim 12, wherein the substrate particles comprise one or more of silica, alumina, CaSiO_x , calcium oxide or magnesium oxide.

14. (Previously Presented) A method as claimed in Claim 1, wherein the substrate particles are in the form of a fumed powder, a colloid, a gel or an aerogel.

15. (Previously Presented) A method as claimed in Claim 1, wherein the transition metal compound is decomposed by heating.

16. (Original) A method as claimed in Claim 15, wherein the transition metal compound is decomposed by heating to a temperature between 200 °C and 1000°C.

17. (Original) A method as claimed in Claim 16, wherein the transition metal compound is decomposed by heating to a temperature between 600 °C and 1000 °C.

18. (Previously Presented) A method as claimed in Claim 1, wherein the carbon nanoparticles are carbon nanotubes.

19. (Previously Presented) A method as claimed in Claim 1, wherein the carbon nanotubes are single walled carbon nanotubes.

20. (Previously Presented) A method as claimed in Claim 1, further comprising the initial step of impregnating the substrate particles with the transition metal compound.

21.-22. (Cancelled).

23. (Currently Amended) A method as claimed in Claim 24, comprising the steps of:

continuously providing substrate particles to an upper part of an inclined surface;
contacting the substrate particles on the inclined surface with a flow of gaseous carbon source;
heating the transition metal compound on the substrate particles; and
collecting carbon nanoparticles formed from a lower part of the inclined surface.

24. (Currently Amended) A method of production of carbon nanoparticles, comprising the steps of: as claimed in claim 1, wherein
providing on substrate particles a transition metal oxalate, formate or multi metal atom carbonyl;
heating the transition metal oxalate, or formate or multi metal atom carbonyl on the substrate particles;
contacting a gaseous carbon source with the substrate particles; and collecting the carbon nanoparticles formed to decompose the transition metal oxalate or formate to the transition metal occurs before contacting the substrate particles with the flow of gaseous carbon source.

25. (Currently Amended) A method as claimed in Claim 24, wherein the transition metal oxalate, or formate or multi metal atom carbonyl is nickel formate and the substrate particles are silica particles.

26. (Previously Presented) Carbon nanoparticles formed by a method as claimed in Claim 1.